

What is claimed is:

1. An elastic crawler traveling apparatus comprising:

an elastic crawler in a shape of an endless belt formed of an elastic material,

a sprocket for a crawler belt arranged to be brought into contact with an inner face of the elastic crawler,

a driven wheel; and

a rolling wheel,

wherein the elastic crawler comprises a belt main body; a plurality of projections formed to project at intervals therebetween along a peripheral direction of the elastic crawler on the belt main body; and a tension member embedded in an inner portion of the belt main body for restricting elongation of the belt main body,

wherein the sprocket for the crawler belt comprises a contact portion to contact the belt main body, the contact portion having a contact width which is greater than a root width of the projections in a belt width direction of the elastic crawler;

wherein the sprocket for the crawler belt comprises a plurality of drive tooth portions for engaging with the projections, a barrel portion main body being integrally formed with the drive tooth portions;

wherein each pair of the projections that is adjacent in the peripheral direction of the elastic crawler has a valley portion formed therebetween as an engaging groove for being engaged by the drive tooth portions; and

wherein the drive tooth portions comprise a driving portion to be engaged with the engaging groove in the peripheral direction of the elastic crawler; and a guide portion to be

engaged with the projections in the belt width direction for restricting shifting of the drive tooth portions and the projections in the belt width direction relative to each other.

2. An elastic crawler traveling apparatus comprising:

an elastic crawler in a shape of an endless belt formed of an elastic material,

a sprocket for a crawler belt arranged to be brought into contact with an inner face of the elastic crawler,

a driven wheel; and

a rolling wheel,

wherein the elastic crawler comprises a belt main body; a plurality of projections formed to project at intervals therebetween along a peripheral direction of the elastic crawler on the belt main body; and a tension member embedded in an inner portion of the belt main body for restricting elongation of the belt main body,

wherein the sprocket for the crawler belt comprises a contact portion to contact the belt main body, the contact portion having a contact width which is substantially equal to an embedding width of the tension member in a belt width direction of the elastic crawler,

wherein the sprocket for the crawler belt comprises a plurality of drive tooth portions for engaging with the projections; and a barrel portion main body integrally formed with the drive tooth portions;

wherein each pair of the projections that is adjacent in the peripheral direction of the elastic crawler has a valley portion formed therebetween as an engaging groove for being engaged by the drive tooth portions; and

wherein the drive tooth portion comprises a driving portion for engagement with the engaging groove in the peripheral direction of the elastic crawler; and a guide portion for

engaging with the projections in the belt width direction for restricting shifting of the drive tooth portion and the projection in the belt width direction relative to each other.

3. An elastic crawler traveling apparatus comprising:

an elastic crawler in a shape of an endless belt formed of an elastic material,

a sprocket for a crawler belt arranged to be brought into contact with an inner face of the elastic crawler,

a driven wheel; and

a rolling wheel,

wherein the elastic crawler comprises a belt main body; a plurality of projections formed to project at intervals therebetween along a peripheral direction of the elastic crawler on the belt main body; and a tension member embedded in an inner portion of the belt main body for restricting elongation of the belt main body,

wherein the sprocket for the crawler belt comprises a contact portion to contact the belt main body, the contact portion having a contact width which is greater than a root width of the projections in a belt width direction of the elastic crawler;

wherein the sprocket for the crawler belt comprises a drive tooth portion in a rod-like shape for engaging with the projections; and a pair of barrel portion main bodies having a cylindrical shape and sandwiching the drive tooth portion therebetween; and

wherein the barrel main body defines, along its peripheral portion, a plurality of mud discharging holes for discharging soil, mud or the like.

4. An elastic crawler traveling apparatus comprising:

an elastic crawler in a shape of an endless belt formed of an elastic material,

a sprocket for a crawler belt arranged to be brought into contact with an inner face of the elastic crawler,

a driven wheel; and

a rolling wheel,

wherein the elastic crawler comprises a belt main body; a plurality of projections formed to project at intervals therebetween along a peripheral direction of the elastic crawler on the belt main body; and a tension member embedded in an inner portion of the belt main body for restricting elongation of the belt main body,

wherein the sprocket for the crawler belt comprises a contact portion to contact the belt main body, the contact portion having a contact width which is substantially equal to an embedding width of the tension member in a belt width direction of the elastic crawler,

wherein the sprocket for the crawler belt comprises a drive tooth portion in a rod-like shape for engaging with the projections; and a pair of barrel portion main bodies having a cylindrical shape and sandwiching the drive tooth portion therebetween; and

wherein the barrel main body defines, along its peripheral portion, a plurality of mud discharging holes for discharging soil, mud or the like.

5. An elastic crawler traveling apparatus comprising:

an elastic crawler in a shape of an endless belt formed of an elastic material,

a sprocket for a crawler belt arranged to be brought into contact with an inner face of the elastic crawler,

a driven wheel; and

a rolling wheel,

wherein the elastic crawler comprises a belt main body; a plurality of projections

formed to project at intervals therebetween along a peripheral direction of the elastic crawler on the belt main body; and a tension member embedded in an inner portion of the belt main body for restricting elongation of the belt main body,

wherein the sprocket for the crawler belt comprises a contact portion to contact the belt main body, the contact portion having a contact width which is greater than a root width of the projections in a belt width direction of the elastic crawler;

wherein the contact portion includes a contact part having a width corresponding to the root width of the projections in the belt width direction, and projects radially outwardly relative to another part of the contact portion.

6. An elastic crawler traveling apparatus comprising:
an elastic crawler in a shape of an endless belt formed of an elastic material,
a sprocket for a crawler belt arranged to be brought into contact with an inner face of the elastic crawler,

a driven wheel; and

a rolling wheel,

wherein the elastic crawler comprises a belt main body; a plurality of projections formed to project at intervals therebetween along a peripheral direction of the elastic crawler on the belt main body; and a tension member embedded in an inner portion of the belt main body for restricting elongation of the belt main body,

wherein the sprocket for the crawler belt comprises a contact portion to contact the belt main body, the contact portion having a contact width which is substantially equal to an embedding width of the tension member in a belt width direction of the elastic crawler,

wherein the contact portion includes a contact part having a width corresponding to

the root width of the projections in the belt width direction, and projects radially outwardly relative to another part of the contact portion.

7. The elastic crawler traveling apparatus according to Claim 1,
wherein the guide portion includes a pair of right and left restricting faces for contacting opposite sides of the projections in the belt width direction for restricting shifting of the projections relative to the drive tooth portions in the belt width direction.

8. The elastic crawler traveling apparatus according to Claim 7,
wherein each of the restricting faces is inclined so that a clearance from the projections increases toward each of opposite ends of the guide portion in the belt width direction.

9. The elastic crawler traveling apparatus according to Claim 2,
wherein the guide portion includes a pair of right and left restricting faces for contacting opposite sides of the projections in the belt width direction for restricting shifting of the projections relative to the drive tooth portions in the belt width direction.

10. The elastic crawler traveling apparatus according to Claim 9,
wherein each of the restricting faces is inclined so that a clearance from the projections increases toward each of opposite ends of the guide portion in the belt width direction.

11. The elastic crawler traveling apparatus according to Claim 1, wherein the

barrel portion main body is formed with a recess portion between each pair of the drive tooth portions that are adjacent in the peripheral direction of the barrel portion main body so as to prevent a projected end portion of each of the projections and the barrel portion main body from being brought into contact with each other.

12. The elastic crawler traveling apparatus according to Claim 2, wherein the barrel portion main body is formed with a recess portion between each pair of the drive tooth portions that are adjacent in the peripheral direction of the barrel portion main body so as to prevent a projected end portion of each of the projections and the barrel portion main body from being brought into contact with each other.